

OCT 17 2006

Application No.: 10/713,406

Docket No.: 03226/337001; SUN040164

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application and for indicating that the drawings filed on November 14, 2003, have been approved.

Disposition of Claims

Claims 1-33 were pending in the application. Claims 3-8, 16, 20-21, 30-31, and 33 have been cancelled by this reply without prejudice or disclaimer. Of the remaining pending claims, claims 1, 17, and 32 are independent. The remaining pending dependent claims depend, either directly or indirectly, from claims 1 and 17.

Specification Amendments

Paragraph [0043] has been amended to correct a typographical error. No new matter has been added by way of this amendment.

Claim Amendments

Independent claims 1, 17, and 32 have been amended to clarify the invention. Further, dependent claims 2, 13, 18-19, 22-25, and 28-29 have been amended to address antecedent basis issues arising from the amendments made to the aforementioned independent claims and to further clarify various aspects to the invention. Support for the amendments may be found, for example, in paragraphs [0028]-[0041] of the present application. No new matter is added by any of the aforementioned amendments.

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Claim Objections

In view of the above amendments, the objections to claims 13, 16, and 28 are now moot. Accordingly, withdrawal of the objections is respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 1-3, 6-9, 17-20, 23-26, and 32 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,047,521 ("Bunnell"). Claims 3, 6-8, and 20 have been cancelled by this reply. Accordingly, this rejection is now moot with respect to the cancelled claims. To the extent that these rejections still apply to the pending claims, the rejection is respectfully traversed.

Amended independent claim 1 requires, in part, (i) a first speculative buffer and a first principle buffer (*see, e.g.*, Present Application, Figure 2); (ii) allocating the first speculative buffer using a probe (*see, e.g.*, Present Application, code sample 2); (iii) tracing a program, where the tracing is associated with a state value (*see, e.g.*, Present Application, [0037] and Figure 4); (iv) storing data in the first speculative buffer (*see, e.g.*, Present Application, code sample 2, [0037], and Figure 4); (iv) committing data to the first principle buffer based on the state value if a probe comprising a commit function is encountered (*see, e.g.*, Present Application, code sample 2, [0037], and Figure 4); and (v) discarding the data from the first speculative buffer based on the state value, if a probe with a discard function is encountered (*see, e.g.*, Present Application, code sample 2, [0037], Figure 4).

Turning to the rejection, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

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Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). (MPEP § 2131). The Applicant respectfully asserts that Bunnell fails to disclose all the limitations of amended independent claim 1.

Specifically, Bunnell discloses a tracing system that temporarily stores traced data in trace data buffers before transferring the traced data to an appropriate start buffer, main buffer, or end buffer. More specifically, Bunnell only enables event data to be traced or not traced based on circumstances *leading up* to the trace event, and does not allow traced data to be committed or discarded *after* tracing has already occurred.

Moreover, Bunnell does not determine whether to commit or discard data in the temporary buffer based on a function in an encountered probe. Further, Bunnell does not disclose a state value associated with a tracing (*see, e.g.*, Present Application, [0037] and Figure 4) or using a state value associated with the tracing to determine whether to commit or discard the data in the temporary buffer.

In view of the above, Bunnell does not disclose all the limitations of amended independent claim 1. Amended independent claims 17 and 32 include at least the same patentable limitations as amended independent claim 1 and, thus, are also patentable over Bunnell. Pending dependent claims are patentable over Bunnell for at least the same reasons as amended independent claims 1 and 17. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 4-5, 10-12, 13-16, 21-22, 27-31, and 33 are rejected under 35 U.S.C. § 103(a) as being obvious over Bunnell. Claims 4-5, 16, 21, 31, and 33 have been cancelled by this reply.

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Accordingly, this rejection is now moot with respect to the cancelled claims. To the extent that the rejection still applies to the pending claims, the rejection is respectfully traversed.

“To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” (MPEP § 2143).

As discussed above, Bunnell does not teach or suggest all of the limitations of independent claims 1 and 17. Moreover, the Applicant asserts that the limitations of amended independent claims 1 and 17 are not obvious to one skilled in the art at the time the invention. Specifically, Bunnell only discloses a tracing system for defining the collection of detailed trace data *before* the data is actually traced. To this end, Bunnell provides a variety of mechanisms for strategically filtering, storing, capturing, and displaying traced data “to maximize the discriminating detection and intelligent analysis of event data,” but does not mention any further processing of the traced data *after* obtaining the trace data. (*see, e.g.*, Bunnell, col. 3).

In view of the above, amended independent claims 1 and 17 are patentable over Bunnell. Pending dependent claims are patentable over Bunnell for at least the same reason as amended independent claims 1 and 17. As such, withdrawal of this rejection is respectfully requested.

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Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03227/337001; SUN040164).

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Respectfully submitted,

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Attachment (Clean Version of Paragraph [0043])

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Clean Version of Paragraph [0043]

--On the other hand, in one or more embodiments, speculative tracing may occur where the speculative buffer is used on more than one processor. In this case, the speculative buffers associated with the *speculation()* function must be asynchronously cleaned (which may potentially lead to a higher rate of dirty speculative drops). The rate at which the speculative buffers are cleaned occurs at a user-configurable, fixed interval (*i.e.*, not at probe-triggering time) by making a call to each processor to atomically reset each speculative buffer. Once a speculative buffer has been committed or discarded, the speculative buffer cannot be reused until all of the processors take the same action on their respective speculative buffers. Accordingly, subsequent *speculation()* function calls will be "silently" discarded and *commit()* and *discard()* function calls will fail thereby incrementing a counter, whose contents may be reported back to the user.--